Serial Number: 09/688,006

Title: USING CONSTRAINT-BASED HEURISTICS TO SATISFICE STATIC SOFTWARE PARTITIONING AND ALLOCATION OF HETEROGENEOUS DISTRIBUTED SYSTEMS

## **IN THE SPECIFICATION**

Please amend the specification as follows:

The Table 6 on page 21 is amended as follows:

**Table 6 Calculating Communication Strengths** 

Step Function	Maximum (= 10)	Average (= 5)	Low = (1)
Timing	if Time > minimum	if Time = average	if Time < <del>maximum</del>
	maximum		minimum
Frequency	if frequency >	if frequency =	if frequency <= minimum
	maximum rate of	average rate of small	rate of small messages on
	small messages on	messages on bus	bus
	bus		
Bandwidth	if data size >	if data size = average	if data size <= minimum
	maximum bus	bus capacity	bus capacity
	capacity		

The Table beginning at page 42, line 26 – page 43, lines 2 is amended as follows:

**Table 12 Initial Platform Loads** 

Platform (Component)	<b>Processor</b> Capacity	Processor Utilization	Memory Capacity	Memory <b>Utilization</b>
P1 (C4)	15 mips	68%	300 mb	84%
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P2 (C3 &C5)	60 mips	93%	200 mb	88%
P3 (C1)	70 mips	89%	l gb	90%
P4 (C2)	50 mips	90%	<del>I gb-</del> <u>1 gb</u>	80%

The paragraph beginning at page 37, line 26 is amended as follows:

FIG. 4 shows an exemplary system that comprises four computers, with a functional partitioning and allocation into four components:

- 1. Sonar software (processing data from the Fore sensors), Tasks F<sub>1</sub>-F<sub>4</sub> in FIG. 4,
- 2. Sonar software (processing data from the Aft sensors), Tasks A<sub>1</sub>-A<sub>4</sub> in FIG. 4,
- 3. Bearing Tracker software, Tasks B<sub>1</sub>-B<sub>3</sub> in FIG 4, and ·
- 4. Display software, Tasks D<sub>1</sub>-D<sub>2</sub> in FIG. 4 Tasks D<sub>1</sub>-D<sub>3</sub> in FIG. 4.

